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Case Report

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# Treatment experience with laser of perianal giant condylomas in a pregnant patient

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## ABSTRACT

Condyloma acuminatum is a multitude of large, giant polypoid lesions with an exophytic appearance that occur in and around the vagina, cervix, anal, and perineal regions as a result of human papilloma virus (HPV) infection. The most commonly preferred treatments for these lesions currently include surgical excision, laser, electrocautery, and/or trichloroacetic acid application. A 33-year-old woman with her second pregnancy, parity 1, complained of a painful, bleeding, itchy mass around the anus at the gynecologic control approximately 1 week before delivery. She stated that these masses, which were very small a few months ago, had grown rapidly in the last few weeks. No condyloma was detected in the cervix and vagina. During the general surgical examination, giant condylomas with fragile bleeding were detected in the perianal region on the right and left sides of the anal entrance. Condylomas measuring 6*4.5*4 cm on the largest area and 2.5*2.1 cm on the smallest area on the right side of the anal opening and 12*4*4* on the left side were excised with laser and sent to pathology for examination. The excised areas were cauterized again with the help of a laser. The operation was terminated after hemostasis control. The pathology result was reported as squamous papilloma. Laser treatment of giant condylomas can be an effective and preferable method for pregnant women.

**Keywords:** Condyloma acuminatum, pregnant patient, surgical excision

## INTRODUCTION

Multiple large polypoid lesions with exophytic appearance that occur in the vaginal cervix anal and perineal region as a result of human papilloma virus (HPV) infection are called Buschke-Löwenstein tumor (BLT) or giant condyloma acuminatum (GCA).[1] The prevalence of HPV infection during pregnancy is around 46%. Although the reason for the rapid growth and increase in lesions caused by HPV during pregnancy is not known for certain, it is assumed to be caused by physiologic changes in the external genital organs, partial suppression of the immune system, and increased estrogen hormone. Because the onset is likely to occur at the age of 25 to 34 years, which is the age of childbearing, this condition can occur during pregnancy.[2] The main symptoms of condyloma acuminata are pain, itching, increased vaginal secretions, and bleeding, but many cases are asymptomatic, and the condition may be first discovered during pregnancy.[3] Other views suggest that vaginal discharges and genital discharges that increase during pregnancy increase the possibility of HPV to transform into condyloma.[4,5]

Local treatments (imiquimod cream), laser therapy, cryotherapy, photodynamic therapy, trichloroacetic acid therapy, local hypothermia, surgical excision, and electrosurgery are used in the treatment of condyloma. In addition, drugs such as interferon, 5-fluorouracil cream, and cidofovir have also been used in the past in pregnant women but are no longer recommended. Furthermore, sinecatechins, podophyllin resin, and podophyllotoxin should not be used in pregnant women.[6,7]

It is very unlikely that these tumor-like lesions may show malignant degeneration. The recurrence rate after these treatments is high (up to 50%). Multiple sessions are usually required for successful treatment. Additionally, applying such treatments during pregnancy may cause some complications, such as severe bleeding, local bacterial infections, pain, preterm labor, and miscarriage.[7-9]

With this case report, we wanted to emphasize that laser treatment of giant condylomas may be an effective and preferable method in pregnant women.

## CASE

A 33-year-old woman with her second pregnancy, parity 1, complained of a painful, bleeding, itchy mass around the anus at the gynecologic control approximately one week before delivery. She stated that these masses, which were very small a few months ago, had grown rapidly in the last few weeks. No condyloma was detected in the cervix and vagina.

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During the general surgical examination, giant condylomas with fragile bleeding were detected in the perianal region on the right and left sides of the anal entrance (Figure 1, 2). Excision and cauterization of condylomas were planned by general surgery in the same session with C/S. OP was initiated through a Pfannenstiel incision in the patient under general anesthesia under sterile conditions with attention to privacy. The skin and subcutaneous abdominal folds were duly opened. The abdomen was incised. A KERR incision was performed in the lower uterine segment. The Ballottement test was applied to the baby's head, and a baby girl was delivered at 08:46, measuring 51/36/3560 g with an Apgar score of 8/9. Afterwards, general surgery was included in the operation, and no condyloma was detected in the rectum with the anoscope.

**Figure 1**. Preoperative giant condylomas with fragile bleeding were detected in the perianal region on the right and left sides of the anal entrance

**Figure 2.** Postoperative giant condylomas with fragile bleeding were detected in the perianal region on the right and left sides of the anal entrance

Condylomas measuring 6*4.5*4 cm on the largest area and 2.5*2.1 cm on the smallest area on the right side of the anal opening and 12*4*4* on the left side were excised with laser and sent to pathology for examination. The excised areas were cauterized again with the help of a laser (Neo V Laser, 1470 mm diode laser device, registered with the republic of Turkiye ministry of health, global product number (Barcode): 7266703007132). The operation was terminated after hemostasis control. The pathology result was reported as squamous papilloma. No surgical or obstetric complications were observed in the postoperative period. Postoperative side effects were pain (pain intensity was evaluated with a visual analog scale), healing time (it took 30 days for the wound to close completely), and minimal scar formation (There was approximately 5 cm of scar tissue on both lateral sides of the anus due to secondary closure.). No new condyloma formation or recurrence was detected in the follow-up of the patient for about one year.

## DISCUSSION

Active vulvovaginal HPV type 6 and 11 infections may have different clinical pictures. Transmitted HPV has the potential to be self-eradicated or to enter the latent phase, where it can persist for years as a subclinical infection. It may form benign lesions as well as transform into a precancerous lesion with accompanying oncogenic subtypes. Furthermore, it may also result in HPV-induced tumor-like masses.[8,9] Condyloma acuminatum (CA) refers to the tumor-like masses that range in size from a few millimeters to 1-2 cm and are caused by HPV infection. Up to 30% of CA in non-pregnant women may regress spontaneously under the influence of humoral and cellular immunity. The viral genome can be detected in normal epithelium months or even years after the healing of visible lesions (latent or subclinical infection).[7] It does not show spontaneous regression in pregnancy, and recurrence is common due to treatment failure.[8] Maternal complications such as vaginal bleeding, vaginal obstruction, and urethral obstruction can occur, increasing the ratio of the cesarean section.[9-11] However, Cohen et al.[11] did not report an increased rate of complications in fetuses born to mothers with CA.Depending on the size and number of lesions, condylomas can cause obstructions in the mother's birth canal, which can cause problems during delivery. No complications developed in the mother and baby after delivery and condyloma excision and cauterization in our case.

Furthermore, although at a low rate, the HPV is known to be transmitted to the baby through the birth canal. Although Caesarean section is associated with a low risk of virus transmission, cases have been reported. The choice of treatment during pregnancy is crucial. No conclusive evidence shows that any of the available treatments is superior to another, and no single treatment alone is ideal for all patients or all warts.[12] External genital HPV lesions can be treated with trichloroacetic acid, liquid nitrogen, laser ablation, or electrocautery at any time during pregnancy.[13] Imiquimod, podophyllin, and podofilox should not be used freely during pregnancy.[12] Although the toxicity of imiquimod in pregnant women has not been thoroughly studied, animal studies have revealed no teratogenic or toxic effects. The Centers for Disease Control and Prevention does not recommend topical imiquimod treatment during pregnancy. However, it is not prohibited to use it during pregnancy, and the package leaflet for imiquimod cream states that it should be used during pregnancy "only when clearly needed." In fact, In a study reported that in the 1950s that about 35% of Japanese facilities were using imiquimod cream for pregnant women with condyloma acuminata. As there is only limited information available on the use of imiquimod in pregnancy, it is not recommended as a first-line treatment for pregnant women.[14]

The most preferred treatment method is surgery, and its efficacy has been proven in the early stages of the disease.[8] Surgical excision can be performed using conventional surgical techniques or electrocautery. The large tissue defect in the vulvar or perianal region after removal of the giant tumor may increase the incidence of complications such as inadequate tissue healing, inflammation and infection, miscarriage, and preterm delivery. Thus, partial-thickness skin grafting may be recommended after excision.[15]

Surgical excision and electrosurgery surgical excision using scalpels or scissors enables the direct removal of lesions, and electrosurgery involves the use of electrical energy to destroy lesions.[15] Some experts argue that laser treatment is more effective in reducing bleeding, pain, and scarring.[17-21]

## CONCLUSION

There are many methods in the treatment of condyloma. As we have experienced in this case, the use of laser in the treatment of giant condylomas has shown that it can be a preferable treatment method with few complications and good treatment success.

## ETHICAL DECLARATIONS

### Informed Consent
All patients signed a free and informed consent form.

### Referee Evaluation Process
Externally peer-reviewed.

### Conflict of Interest Statement
The authors have no conflicts of interest to declare.

### Financial Disclosure
The authors declared that this study has received no financial support.

### Author Contributions
All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

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I was born in İstanbul on 30.06.1969; I completed my education life in Istanbul. I am a graduate of İstanbul University Faculty of Medicine and I did my specialization at the same faculty. I have currently been working as a gynecology and obstetrics specialist at Pendik Health Application and Research Center for about 4 years. I am a member of the Turkish Gynecology and Obstetrics Association and the Turkish Medical Association. I am always open to innovations that will open new horizons for myself in my profession and move me forward professionally.